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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,488	07/22/2002	Thomas Richard Kerby Edwards	71745/56925	4085

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EXAMINER

LUDLOW, JAN M

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/049,488	Applicant(s) EDWARDS ET AL.	
	Examiner Jan M. Ludlow	Art Unit 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5-15-2002</u> . | 6) <input type="checkbox"/> Other: ____ |

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1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. Claims 20, 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
3. Claim 20 specifies that the molded and set first drawn material (e.g., the wire) forms a housing with a frangible tip, the first material is not molded and set, and there is no description of forming a housing with a frangible tip from the wire.
4. Figure 5 shows the embodiment of claim 22 having blunt ended plungers with angle-ended channels. There is no enabling disclosure as to how to arrange the three plungers during coating so as to obtain the object pictured in Figure 5. That is, even if the central plunger were displaced fully downward during coating, and the side arm plungers pushed down to contact the central plunger, open channels would not result because the coating would fill the gaps between the blunt ends of the side arm plungers

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and the cylindrical wall of the central plunger. How are open channels obtained?

Where is this disclosed?

5. Claims 9-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Throughout the claims, "positive displacement type substance sampling device" is unclear because it is directed to intended use. The instant device can be used as either a positive displacement pipet (when the plunger travels from the end of the barrel to aspirate and to the end of the barrel to dispense) or an air displacement device (when the plunger is spaced from the end of the barrel during aspiration and dispensing).

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 9-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Hughes 3,882,665.

Hughes teaches coating wire with plastic in an extrusion method, including a step of cooling the wire during the coating process (col 7, lines 63-67). The wires are joined together in a strip 23 with apertures (sprockets) 24 (Figure 3). With respect to claim 22, plural plungers 19 on different axes inside different regions of second molded material 21 having a common core where walls 21 abut are adjacent to apertures 24. Note that the instant method claims read on coating a wire and that no additional steps of

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preparing the device for use as a pipet, or steps directed to using the device as a pipet are claimed.

11. Claims 9-12, 14, 16-17, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Franke US4084730.

Franke teaches making a positive displacement pipet by coating a plastic material around a wire (col. 3, lines 59-64, Figures 1-2). It is the examiner's position that the spray coating method inherently includes molding and setting, that "wire" as commonly used means a thinly drawn metal, and that the plastic and metal inherently have the properties of claim 14, specifically, metal inherently has a higher thermal conductivity and/or heat capacity than plastic.

12. Alternatively, claims 9-12, 14-17, 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Franke US4084730.

The teachings of Franke are given above.

Franke fails to explicitly teach that the plastic is set or that the wire is metal.

It would have been obvious to set the plastic in order to produce its known properties at ambient conditions and to make the wire of metal in order to make a wire of known materials within the common meaning of the word "wire". With respect to claim 15, it would have been obvious to use alternative known coating methods, such as dip coating in place of spray coating for its known coating function.

13. Claims 17, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Pecsar US3877310.

Pecsar teaches bore 93, plunger 92 coupled to bore 466 and plunger 434 (Figs. 5 and 9, col. 13, lines 30-40). Note that the method of making is not seen as defining over the prior art structure, and there are no structural limitations in claim 17.

14. Claims 17, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Devaney US4121739.

15. Devaney teaches bores 54, 56, pistons 12, core 42 and aperture 58. Note that the method of making is not seen as defining over the prior art structure, and there are no structural limitations in claim 17.

16. Claims 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Suovaniemi US4215092.

Suovaniemi teaches molded plastic barrels 18a attached to strip 17a with sprockets 26a. Note that the apparatus claim 17 does not recite any structure and does not require that the central plunger still be present after the second material is molded. The material is structurally capable of having the tips broken by appropriate force or melted at appropriate temperature.

17. Claims 17-18, 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Brophy US006103198A .

Brophy teaches molded plastic barrels 34 attached to strip 46. Note that the apparatus claim 17 does not recite any structure and does not require that the central plunger still be present after the second material is molded. The material is structurally capable of having the tips 36, 52 broken by appropriate force or melted at appropriate temperature.

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18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kopito additionally teaches a positive displacement sampler.

Amis additionally teaches coating a wire with plastic including cooling the wire (col. 2, lines 23, 50-54).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-1260. The examiner can normally be reached on Monday-Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jan M. Ludlow
Primary Examiner
Art Unit 1743

Jml
June 25, 2005